AMENDMENTS TO THE CLAIMS

1. (Currently amended) A pair of ferrules used for an optical fiber connector, the pair of ferrules comprising:

a first ferrule which has an optical fiber-inserting hole and an end portion; and

a second ferrule which has an optical fiber-inserting hole and an end portion, said optical fiber-inserting hole of the second ferrule is substantially the same diameter as the optical fiber-inserting hole of the first ferrule and is arranged opposingly to the first ferrule so that the optical fiber-inserting hole of the second ferrule is positioned coaxially with respect to the optical fiber-inserting hole of the first ferrule, wherein:

the end portion of the first ferrule is opposed to the second ferrule, and has a male convex shape extending to the end of the first ferrule end portion, said male convex shape has one of a conical shape, a spheroidal shape, and a hemispherical shape, and

the end portion of the second ferrule is opposed to the first ferrule, and has a female concave shape provided with a fitting section for receiving the end portion of the male convex shape while making tight contact therewith, said female concave shape has one of a conical shape, a spheroidal shape, and a hemispherical shape.

2-20. (Canceled)

21. (Previously presented) The ferrules used for the optical fiber connector according to Claim 1, wherein the end portion having the male convex shape of the first ferrule is conical, and the cone has an angle of depression of 20° to 80°.

22. (Previously presented) The ferrules used for the optical fiber connector according to Claim 1, wherein each of the first and second ferrules is made of metal.

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23. (Previously presented) The ferrules used for the optical fiber connector according to Claim 1, wherein each of the first and second ferrules is made of nickel alloy.

24. (Previously presented) The ferrules used for the optical fiber connector according to Claim 1, wherein each of the first and second ferrules is made of stainless steel.

25. (Previously presented) The ferrules used for the optical fiber connector according to Claim 1, wherein each of the first and second ferrules is produced by an electroforming method.

26. (Previously presented) A pair of ferrules used for an optical fiber connector, the pair of ferrules comprising:

a first ferrule which has an optical fiber-inserting hole; and

a second ferrule which has an optical fiber-inserting hole and which is arranged opposingly to the first ferrule so that the optical fiber-inserting hole of the second ferrule is positioned coaxially with respect to the optical fiber-inserting hole of the first ferrule, wherein:

an end of the first ferrule, which is opposed to the second ferrule, has a male convex shape, an end of the second ferrule, which is opposed to the first ferrule, has a female concave shape provided with a fitting section for receiving the end having the male convex shape while making tight contact therewith, a base section of the end having the male convex shape is continued to an end edge of an annular step which is formed to have a diameter reduced in a radial direction of the ferrule, and a base section of the end having the female concave shape is continued to an end edge of an annular step which is formed to have a diameter reduced in a radial direction at an open end of the ferrule.

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27. (Previously presented) The ferrules used for the optical fiber connector according to Claim 26, wherein each of the end having the male convex shape and the end having the female concave shape has one of a conical shape, a spheroidal shape, and a hemispherical shape.

28. (Previously presented) The ferrules used for the optical fiber connector according to Claim 26, wherein the end having the male convex shape of the first ferrule is conical, and the cone has an angle of depression of 20° to 80°.

29. (Previously presented) The ferrules used for the optical fiber connector according to Claim 26, wherein each of the first and second ferrules is made of metal.

30. (Previously presented) The ferrules used for the optical fiber connector according to Claim 26, wherein each of the first and second ferrules is made of nickel alloy.

31. (Previously presented) The ferrules used for the optical fiber connector according to Claim 26, wherein each of the first and second ferrules is made of stainless steel.

32. (Previously presented) The ferrules used for the optical fiber connector according to Claim 26, wherein each of the first and second ferrules is produced by an electroforming method.

33. (Withdrawn) An optical fiber connector structure comprising:

a first ferrule which has an optical fiber-inserting hole;

a second ferrule which has an optical fiber-inserting hole and which is arranged opposingly to the first ferrule so that the optical fiber-inserting hole of the second ferrule is positioned coaxially with respect to the optical fiber-inserting hole of the first ferrule;

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a protective sleeve which covers the ferrules; and flange-equipped cylinders each of which has an optical fiber-introducing hole and each of which is provided and fitted on a proximal end side of each of the ferrules, wherein:

an end of the first ferrule, which is opposed to the second ferrule, has a male convex shape, and an end of the second ferrule, which is opposed to the first ferrule, has a female concave shape provided with a fitting section for receiving the end having the male convex shape while making tight contact therewith.

34. (Withdrawn) The optical fiber connector structure according to Claim 33, wherein each of the first and second ferrules is produced by an electroforming method.

35. (Withdrawn) The optical fiber connector structure according to Claim 33, wherein the protective sleeve includes:

a cylindrical sleeve main body; and

a plurality of projections which are provided on an inner circumferential surface of the main body and which support outer circumferential surfaces of the ferrules for the optical fiber, and

the plurality of projections are provided at positions of rotational symmetry with respect to a central axis of the sleeve main body and have an identical height.

36. (Withdrawn) A sleeve, for connecting two optical fiber ferrules therein, comprising:

a cylindrical sleeve main body; and

a plurality of projections which are provided on an inner circumferential surface of the main body and which support outer circumferential surfaces of the optical fiber ferrules, wherein:

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the plurality of projections are provided at positions of rotational symmetry with respect to a central axis of the sleeve main body and have an identical height.

37. (Withdrawn) The sleeve according to Claim 36, wherein the projection has a tapered shape toward the central axis of the sleeve main body.

38. (Withdrawn) The sleeve according to Claim 36, wherein the sleeve is formed by electroforming.

39. (Withdrawn) The sleeve according to Claim 36, wherein the projections extend in parallel to the central axis of the sleeve main body.

40. (Withdrawn) The sleeve according to Claim 36, wherein three of the projections are formed at positions of rotational symmetry at intervals of 120°.

41. (Withdrawn) A method for producing the sleeve as defined in Claim 36, comprising:

forming a plurality of cutouts at positions of rotational symmetry on an outer circumferential surface of a core wire, the plurality of cutouts extending in a longitudinal direction of the core wire;

forming a metal film by electroforming around the core wire formed with the plurality of cutouts; and

removing the core wire from the metal film.

42. (Withdrawn) The method for producing the sleeve according to Claim 41, wherein the core wire is removed by extrusion or extraction.

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43. (Withdrawn) The method for producing the sleeve according to Claim 41, wherein the core wire is extruded from the metal film by bringing a pressurized fluid into contact with the metal film or the core wire.

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